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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/650,107	08/26/2003	Guernsey D.H. Hunt	YOR920030135US1	7225
48813 7590 11/20/2007 LAW OFFICE OF IDO TUCHMAN (YOR) 82-70 BEVERLY ROAD KEW GARDENS, NY 11415			EXAMINER KAWSAR, ABDULLAH AL	
			ART UNIT 2195	PAPER NUMBER
			NOTIFICATION DATE 11/20/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ITUCHMAN@TUCHMANLAW.COM

Office Action Summary

Application No.

10/650,107

Applicant(s)

HUNT ET AL.

Examiner

Abdullah-Al Kawsar

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/27/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5, 7-17, 19-28 and 30-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-17, 19-28 and 30-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-5, 7-17, 19-28 and 30-34 are pending. Claims 6, 18 and 29 are canceled.

Claim Objections

2. Claim 12 is objected to for a potential 101 rejection because of the following informalities: claim 12 is a system claim without any hardware present in the claim body. Applicant is suggested to incorporate "having processor" after "system" to the problem. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7-10, 12-17, 19-22, 24-28 and 30-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over "Tivoli Storage Network Manager"(Tivoli) in view of "The use of life expectancy to manage lotus notes email storage" by Williams G. Pope(Bucky).

5. Tivoli and Bucky were cited in the last office action.

6. As per claim 1, Tivoli teaches the invention substantially as claimed including a method for managing a multi-tiered resource system (page 1, col 1, lines 1-6 "Tivoli

Storage Network Manager is a comprehensive..... associated storage resources.”), the method comprising:

automatically determining if a resource tier is in compliance with a management policy, wherein the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date (page 2, col 2, “Establishing file system.... SAN” lines 1-4 through col 3, lines 1-7); and

if the resource tier is not in compliance with the management policy, increasing available capacity in containers in order to bring the containers in compliance with the management policy (page 1, col 1, lines 14-19 “Tivoli Storage Network Manager provides features administrator-defined policies.”) .

7. Tivoly does not specifically disclose wherein the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date.

8. However, Bucky teaches teaches that the management policy includes requiring that an expiration date of the resource tier occur after a maintenance date (page 1, col 2, lines 13 – 18 “ We demonstrate that these decisions are administrative decisions” through page 2, col 1, lines 1-8; page 2 col 2 “Storage Decisions” lines 41-48 “Installations try to life expectancy” through page 3, col 1, lines 1-2).

9. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Tivoli into the method of Bucky to

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have a management policy requiring an expiration data of the resource tier after the maintenance date. The modification would have been obvious because one of the ordinary skills of the art would have found it motivated to be able to know the expiration date according to the file growth rate for better management of the resource tier and prevent system outage.

10. As per claim 2, Tivoli teaches that increasing available capacity in containers includes allocating additional capacity to containers belonging to the resource tier until the resource tier is in compliance with the management policy (page 2, col 3, lines 8 – 14 “When a threshold is exceeded, Tivoli additional capacity.”).

11. As per claim 3, Tivoli teaches that allocating additional capacity to the containers includes utilizing a capacity reserve belonging to the resource tier (page 1, col 3, lines 5 – 9 “Monitor file systems to automatically processing”).

12. As per claim 4, Bucky teaches wherein allocating additional capacity to the containers includes utilizing available capacity from other containers in the resource system (Page 4, col 2, lines 12-13 “If space is available elsewhere, a second approach is the file system.”).

13. As per claim 5, Bucky teaches that allocating additional capacity to the containers includes allocating additional capacity to containers of higher importance before

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allocating additional capacity to containers of lower importance (page 4, col 2, lines 43 – 44 “Administrators can look through the prime candidates”).

14. As per claim 7, Bucky teaches that calculating the expiration date of the resource tier (page 3, col 2, lines 1- 2 “we can calculate the life expectancy of a file system”).

15. As per claim 8, Bucky teaches that calculating the expiration date of the resource tier includes calculating a life expectancy of each container belonging to the resource tier (page 4, col 1, lines 1 – 5 “ Large installations can have hundreds each file system”, lines 10 – 11 “The strategy we’ve chosen is to organize file systems by their life expectancy”).

16. As per claim 9, Bucky teaches that calculating the life expectancy of the containers includes adjusting the life expectancy of the containers to account for container lead-time (page 3 col 1, lines 1 – 14 “The time period between today and the expected..... consider this a reasonable alternative”).

17. As per claim 10, Tivoli teaches that if the resource tier cannot be brought in compliance with the management policy, alerting that the resource tier is not in compliance with the management policy (page 3, col 1, lines 12 – 13 “Events and data from the SAN are captured for problem resolution.”).

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18. As per claim 12, it is means plus function claim of claim 1 above. Therefore, it is rejected under the same rational as claim 1 above.

19. As per claims 13-17, 19-22 and 24-18, 30-33, they are module and computer readable medium comprising instructions for executing the method of claims 1-5, 7-10 above. They are therefore rejected under the same rational as claims 1-5, 7-10 above.

20. Claims 11, 23 and 34 are rejected under 35 U.S.C. 103(a) being unpatentable over “Tivoli Storage Network Manager”(Tivoli) in view of “The use of life expectancy to manage lotus notes email storage” by Williams G. Pope(Bucky), further in view of Stysczinski (Stysczinski) US Patent No. 5960169.

21. As per claim 11, Tivoli and Bucky discloses all the elements of claim 11 except includes compressing data within the resource tier until the resource tier is in compliance with the management policy.

22. However, Stysczinski teaches that increasing available capacity in containers includes compressing data within the resource tier until the resource tier is in compliance with the management policy (col 15, lines 15-32).

23. It would have been obvious to a person of ordinary skill in art at the time of invention was made to incorporate the teaching of Stysczinski into the combined method of Tivoli and Bucky to compress data in the container to increase container capacity. The

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modification would have been obvious because one of the ordinary skills of the art would compress data in the container to increase space availability for the system to be able to work without any system crash.

24. As per claims 23 and 34, they are system and computer program product claims of claim 11 above. Therefore, they are rejected under the same rationale as claim 11 above.

Response to Amendment

25. Applicant's arguments in respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

TITLE: The use of life expectancy to manage lotus notes email storage, CMG conference 1999.

TITLE: Tivoli Storage Network Manager, IBM 2001

TITLE: Resource allocation for multiple applications, US 7146353 B2

TITLE: Methods and architectures for resource management, US 7111297 B1

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this office action. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Abdullah-Al Kawsar whose telephone number is 571-270-3169. The examiner can normally be reached on 7:30am to 5:00pm, EST.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng Ai T. An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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